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ABSTRACT

Forty children (grades 2-5) with consistent misarticulations on one to three phonemes participated in a self-monitoring program. Ss were taught to discriminate their own correct vs. incorrect articulations and then self-monitoring of correct responses was transferred to the children's natural environments. Data were collected by trained observers and social validation measures were also collected by asking parents and teachers how the children sounded. Results showed that following baseline sessions, all of the Ss demonstrated increases in the use of the target sound in their natural environments. (CL)

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# Programming Rapid Generalization of Speech Gains Through Self-Monitoring Procedures

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Paper presented at the 92nd Annual Convention of the American Psychological Association, Toronto, Ontario, Canada, August, 1984. Further information may be obtained from the authors at the Social Process Research Institute, University of California, Santa Barbara, CA 93106.

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# Programming Rapid Generalization of Speech Gains Through Self-Monitoring Procedures

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## ABSTRACT

Generalization data, collected in speech-impaired children's natural environments, showed that when self-monitoring activities were implemented as part of their treatment, rapid generalization and maintenance of treatment gains could be programmed. The study was replicated in twelve schools in a multiple baseline research design.

Generalization of a newly-learned response outside the clinical setting and/or into spontaneous speech is the most serious problem identified by most speech clinicians (Sommers, 1962; Mowrer, 1971; Wing & Heimgartner, 1973). Recently, researchers have suggested that including the child as an active participant in the instructional program may promote generalization. For example, one suggestion has been to have children choose their own target behaviors (cf. Stokes & Baer, 1977). In addition, researchers have shown that self-monitoring can be very effective in improving behavior or making behavioral changes in handicapped as well as normal children (Rosenbaum & Drabman, 1979; O'Brien, Riner & Budd, 1983; Rhode, Morgan, & Young, 1983; Engel & Groth, 1976). However, even when self-monitoring of a newly-learned behavior is trained in order to promote generalization the self-monitoring itself typically does not generalize to other non-trained environments (cf. Drabman, Spitalnik, & O'Leary, 1973; Robertson, Simon, Pachman, & Drabman, 1979). Thus, it seems particularly important to also design a program where self-monitoring occurs in non-treated, natural environments in order for generalization and maintenance of the target behavior to take place (Rhode, Morgan, & Young, 1983). Therefore, the specific purpose

of this study was to teach the children to discriminate their own correct vs. incorrect articulations; and then, to program self-monitoring of correct responses in the children's natural environments to promote generalization and maintenance of newly-learned articulatory responses.

Forty children, 18 females and 22 males between second and fifth grade (at the start of treatment) participated in this study. The children all demonstrated consistent misarticulations on one to three phonemes.

Data were collected in a multiple baseline design (cf. Hersen & Barlow, 1976) across children and across sounds for some children. That is, the children were enrolled in regular speech and language services without self-monitoring for differing lengths of time before the self-monitoring stage was implemented.

To be assured that no confounding variables existed, two independent data recorders unfamiliar to the child covertly recorded data in a nontreatment environment (e.g., in the classroom, on the playground, and outside the child's classroom).

Reliability measures calculated on a point-by-point basis showed an average percent of agreement between the two observers across the 60 sessions, of 93.33% (range: 40% to 100%).

In addition to collecting data through the use of trained observers, social validation measures were also collected by asking the parents and teachers how the children sounded.

The results for the first 13 children show that prior to baseline only one child (Child 9) showed any type of generalization of the clinical gains regardless of the length of baseline measurements (range: one month to three years). Then following the baseline sessions, all of the children demonstrated increases in the use of the target sound in their natural environments. In addition, the results were replicated with another 27 children both within the same school district and across two other school districts by 5 additional speech and language specialists working in a total of 12 schools.

In summary, this and other research suggest that self-monitoring of correct vs. incorrect speech production is directly related to successful remediation of functional articulation disorders. As the data from this investigation demonstrate, when self-monitoring is programmed effectively, rapid generalization and maintenance of treatment gains will result.

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